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10/643,004

08/18/2003

George Powell

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04/14/2005

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EXAMINER

LABAZE, EDWYN

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,004

Applicant(s)

POWELL ET AL.

Examiner

EDWYN LABAZE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of amendments filed on 1/07/2005.
2. Claims 1-21 are presented for examination.
3. This application claims the benefits of provisional application No. 60/404,796 filed on 8/19/2002.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iima et al. (U.S. 5,646,767) in view of Jam et al. (U.S. 6,824,059).

Re claim 1, 5, 8, 12, 15, and 19: Iima et al. discloses scanning optical system, which includes a first lens 21 for focusing light reflected from a graphical code [herein the code is obtained from scanning the surface 14; col.5, lines 58+] to form a first image [image forming lens 21a] on a first region of the image sensor at a first magnification [herein Iima et al. discloses that the magnification is indicated by a difference between a mean value of the shifts of both ends and a shift of the center], wherein the first lens is separated from the first region of the image sensor by a first distance (as shown in fig. # 24; col.11, lines 30+); a second lens 22 for focusing light reflected from the graphical code to form a second image [image forming lens

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21b] on a second region of the image sensor at a second magnification, wherein the second lens is separated from the second region of the image sensor by a second distance, and wherein the first distance is greater than the second distance and the first magnification is greater than the second magnification (col.7, lines 5+). Iima et al. further discloses a first image sensor [herein broadly interpreted as the image forming lens 21a], and a second image sensor [herein broadly interpreted as the image forming lens 21b], a first field of view, a second field of view, wherein the first field of view is smaller than the second field of view (see fig. # 35).

Iima et al. fails to teach a decoder for processing image data to obtain information contained in the graphical code.

Jam et al. teaches apparatus for capturing images and barcodes, which includes a decoder [herein the A/D converter 225 converts the analog image data from the image sensor 120 to the digital signal processor 235 for decoding] for processing image data to obtain information contained in the graphical code (col.5, lines 42+; col.9, lines 8+).

In view of Jam et al.'s teachings, it would have obvious to an artisan of ordinary skill in the art at the time the invention was made to employ a decoder for processing image data to obtain information contained in the graphical code into the teachings of Iima et al. so as to decode and process the scanned image. Furthermore, such modification would provide a means of outputting the data representative of the information contained in the scanned image/code into data, and provide recognition of the encoded symbol into data characters. Moreover, such modification would have been an obvious extension as taught by Iima et al., therefore an obvious expedient.

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Re claims 2-3, 9-10, 16-17, and 20-21: Iima et al. teaches an apparatus, wherein the first is substantially identical to the second lens, and wherein the first lens and second lens are fixed in position (col.8, lines 1+).

Re claims 4 and 11: Iima et al. discloses an apparatus, wherein the image data corresponds to either the first image or the second image (col.11, lines 31+).

Re claims 6 and 13: Iima et al. teaches an apparatus, wherein a first area between the first lens 21 and the first region of the image sensor 21a defines a first optical path, wherein a second area between the second lens 22 and the second region of the image sensor 21b defines a second optical path (see fig. # 38; col.14, lines 38+), and further comprising at least one baffle [herein described as a light interrupting member 15] for preventing light in the first optical path from entering the second optical path and for preventing light in the second optical path from entering the first optical path (see fig. # 21; col.9, lines 60-67; col.10, lines 1+).

Re claims 7 and 14: Iima et al. discloses an apparatus, further comprising a third lens 23 for focusing light reflected from the graphical code to form a third image on a third region of the image sensor, wherein the third lens is separated from the third region of the image sensor by a third distance, and wherein the third distance is greater than the second distance but less than the first distance (see figs. # 13, 15-16; col.8, lines 5+).

Re claim 18: Iima et al. teaches an apparatus, wherein the first region [herein broadly interpreted as a first surface 21a] and the second region [herein broadly interpreted as a second surface 21b] correspond to distinct partitions of the image sensor (col.6, lines 1+).

Response to Arguments

6. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Li et al. (U.S. 5,821,522) discloses optical scanner with high-speed zoom capability.

Fikes et al. (U.S. 5,914,479) teaches counter-rotating scanner.

Chang (U.S. 6,118,600) discloses lens switch apparatus.

Hendricks et al. (U.S. 6,568,594) teaches optical scanning device.

Ishihara (U.S. 6,590,688) discloses optical scanning apparatus and image forming apparatus using the same.

Hayashi et al. (U.S. 6,771,407) teaches optical scanner and image forming apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (571) 272-2395.

The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

el
Edwyn Labaze
Patent Examiner
Art Unit 2876
April 2, 2005



THIEN M. LE
PRIMARY EXAMINER